

CLAIMS

What Is Claimed Is:

1. An endosseous dental implant comprising:
5 a shaft made from a biocompatible material, said shaft having a distal end and a proximal end;
10 an abutment-implant interface disposed towards the proximal end of said shaft; and
a bone-tissue apposition surface configured to approximate the physiological contours of naturally occurring bone-tissue morphology.

15 2. The endosseous dental implant according to Claim 1, wherein said bone-tissue apposition surface has a scalloped appearance.

20 3. The endosseous dental implant according to Claim 2, wherein the highest points of said bone-tissue apposition surface substantially aligns with the interproximal areas of the bone-tissue, and wherein the lowest points of said bone-tissue apposition surface substantially aligns with the buccal and lingual area of the bone-tissue.

25 4. The endosseous dental implant according to Claim 1 further comprising:
a soft-tissue apposition surface configured to approximate the physiological contours of naturally occurring soft-tissue morphology.

30 5. The endosseous dental implant according to Claim 1 further comprising:
a means for connecting an abutment to said abutment-implant interface for use in a two-stage procedure.

35 6. The endosseous dental implant according to Claim 5, wherein said abutment-implant interface has a substantially planar upper surface approximately 90° to the longitudinal axis of said shaft, and wherein said planar upper surface substantially surrounds said means for connecting.

7. The endosseous dental implant according to Claim 5, wherein said abutment-implant interface has a contoured upper surface, and wherein said contoured upper surface substantially surrounds said means for connecting.

8. The endosseous dental implant according to Claim 7, wherein a lower surface of the abutment substantially abuts against said contoured upper surface, thereby providing improved lateral support.

5

9. The endosseous dental implant according to Claim 1, further comprising: an abutment permanently attached to said abutment-implant interface for use in a one-stage procedure.

10

10. The endosseous dental implant according to Claim 9, wherein said shaft and said abutment are constructed from a single piece of material.

11. The endosseous dental implant according to Claim 9, wherein said abutment 15 has a substantially planar upper surface approximately 90° to the longitudinal axis of said shaft and wherein said planar upper surface substantially surrounds a chimney.

12. The endosseous dental implant according to Claim 9, wherein said abutment has a contoured upper surface and wherein said contoured upper surface substantially 20 surrounds a chimney.

13. A two-stage endosseous dental implant, comprising:
a shaft made from a biocompatible material, said shaft having a distal end and a proximal end;

25 an abutment-implant interface disposed towards the proximal end of said shaft;

a bone-tissue apposition surface configured to approximate the physiological contours of naturally occurring bone-tissue morphology; and
a means for connecting an abutment to said abutment-implant interface.

30

14. The two-stage endosseous dental implant according to Claim 13, wherein said abutment-implant interface has a substantially planar upper surface approximately 90° to the longitudinal axis of said shaft, and wherein said planar upper surface substantially surrounds said means for connecting.

35

15. The two-stage endosseous dental implant according to Claim 13, wherein said abutment-implant interface has a contoured upper surface and wherein said contoured upper surface substantially surrounds said means for connecting.

5 16. A one-stage endosseous dental implant, comprising:
a shaft made from a biocompatible material, said shaft having a distal end and a proximal end;
a bone-tissue apposition surface configured to approximate the physiological contours of naturally occurring bone-tissue morphology; and
10 an abutment permanently attached to the proximal end of said shaft.

17. The one-stage endosseous dental implant according to Claim 16, wherein said abutment has a substantially planar upper surface approximately 90° to the longitudinal axis of said shaft, and wherein said planar upper surface substantially surrounds a chimney.
15

18. The one-stage endosseous dental implant according to Claim 16, wherein said abutment has a contoured upper surface and wherein said contoured upper surface substantially surrounds a chimney.
20

19. A two-stage endosseous dental implant system, comprising:
a shaft made from a biocompatible material, said shaft having a distal end and a proximal end;
a bone-tissue apposition surface configured to approximate the physiological contours of naturally occurring bone-tissue morphology;
25 an abutment-implant interface disposed towards the proximal end of said shaft;
an abutment configured to attach to said abutment-implant interface;
a means for connecting said abutment to said abutment-implant interface;
and
30 a crown having a distal end configured to fit over said abutment.

20. The two-stage endosseous dental implant system according to Claim 19, wherein said abutment-implant interface has a substantially planar upper surface substantially surrounding said means for connecting, and wherein said upper planar surface is approximately 90° to the longitudinal axis of said shaft.
35

21. The two-stage endosseous dental implant system according to Claim 20, wherein said abutment has a substantially planar upper abutment-crown interface surface.

5 22. The two-stage endosseous dental implant system according to Claim 20, wherein said abutment has a contoured upper abutment-crown interface surface substantially surrounding a chimney, and wherein the distal end of said crown is configured such that at least the outside surface of said crown extends to and follows the contours of upper abutment-crown interface and/or the contours of said abutment-implant interface, thereby 10 providing a narrow depth between the distal end of said crown and naturally occurring bone-tissue morphology..

15 23. The two-stage endosseous dental implant system according to Claim 20, wherein said abutment-implant interface has a contoured upper surface substantially surrounding said means for connecting, and said contoured upper surface approximately matches the contour of the natural bone morphology, and wherein said abutment has a lower surface configured to substantially abut said contoured upper surface.

20 24. The two-stage endosseous dental implant system according to Claim 23, wherein said abutment has a substantially planar upper abutment-crown interface surface.

25 25. The two-stage endosseous dental implant system according to Claim 23, wherein said abutment has a contoured upper abutment-crown interface surface substantially surrounding a chimney, and wherein the distal end of said crown is configured such that at least the outside surface of said crown extends to and follows the contours of upper abutment-crown interface and/or the contours of said abutment-implant interface, thereby 30 providing a narrow depth between the distal end of said crown and naturally occurring bone-tissue morphology.

35 26. A one-stage endosseous dental implant system, comprising:
a shaft made from a biocompatible material, said shaft having a distal end and a proximal end;
a bone-tissue apposition surface configured to approximate the physiological contours of naturally occurring bone-tissue morphology;
an abutment securely attached to the proximal end of said shaft; and

a crown having a distal end configured to secure to said abutment.

27. The one-stage endosseous dental implant system according to Claim 26, wherein said abutment has a substantially planar upper surface substantially surrounding a chimney, and wherein said upper planar surface is approximately 90° to the longitudinal axis of said shaft.

28. The one-stage endosseous dental implant system according to Claim 26, wherein said abutment has a contoured upper surface substantially surrounding a chimney, and wherein said contoured upper surface approximately matches the contour of naturally occurring bone-tissue morphology.

29. The one-stage endosseous dental implant system according to Claim 28, wherein the distal end of said crown is configured such that at least the outside surface of said crown extends to and follows the contours of said contoured upper surface, thereby providing a narrow depth between the distal end of said crown and the naturally occurring bone level.

20 add
B'

25

30

35